

T10.8	For the purpose of effecting a modification to a plan, the administration concerned shall, having regard to the relevant provisions associated with the Plan, send to the Bureau the relevant information listed in Appendix S4. This action shall be taken within the time limits specified in the relevant appendix.
T10.9	The Bureau, upon receiving the information under No. T10.8:
T10.10	a) determine in accordance with Appendix S6 the administrations whose allotments or assignments are considered to be affected;
T10.11	b) include their names in the information received under No. T10.8;
T10.12	c) publish the complete information in its Weekly Circular;
T10.13	d) promptly inform all administrations affected of its actions and the results of its calculations, drawing their attention to the relevant Weekly Circular.
T10.14	Following receipt of the Weekly Circular, an administration believing that it should have been included in the list of administrations whose services are considered to be affected may, giving the technical reasons for so doing, request the Bureau to include its name. The Bureau shall study this request on the basis of Appendix S6 and the relevant rules of Procedure. In the event that the request to be included in the list of affected administrations is accepted by the Bureau, an addendum to the publication mentioned in T10.12 shall be published by the Bureau. Should the Bureau reach a negative conclusion, it shall inform the administrations concerned.
T10.15	The administration seeking agreement and those with which it is sought, or the Bureau, may request any additional information they consider necessary. The Bureau shall be sent copies of any such requests and the replies.
T10.16	Comments from administrations on the information published pursuant to T10.12 should be sent either directly to the administration proposing the modification or through the Bureau. In any event the Bureau shall be informed that comments have been made. The Bureau shall inform the administration proposing the modification of the comments that have been made.
T10.17	An administration which has not notified its comments either to the administration seeking agreement or to the Bureau within a period of four months following the date of the weekly circular referred to in T10.12 shall be understood to have agreed to the proposed modification. This time-limit may be extended by up to three months for an administration that has requested additional information under T10.15 or for an administration that has requested the assistance of the Bureau under T10.18. In the latter case the Bureau shall inform the administrations concerned of this request.

T10.18	Any administration involved in this procedure may request the assistance of the Bureau in seeking agreement:
T10.19	a) in applying any step of this procedure;
T10.20	b) in carrying out any technical study necessary for the application of this procedure.
T10.21	If, following action by the Bureau in response to a request for assistance under No. T10.18 the Bureau receives no reply or decision within three months of its request for a decision in the matter from an administration whose agreement has been sought, the administration which requested the agreement shall be deemed to have fulfilled its obligations under this procedure. It shall also be deemed that the administration which did not give its decision has undertaken:
T10.22	That no complaint will be made in respect of harmful interference affecting the services rendered by its stations which may be caused by the use of the assignment in conformity with the proposed modification to the Plan, and
T10.23	If no comments have been received on the expiry of the periods specified in T10.17, or if agreement has been reached with the administrations which have made comments and with which agreement is necessary, or if the provisions of T10.21 have been applied, the administration proposing the modification shall inform the Bureau, indicating the final characteristics of the frequency assignment, together with the names of the administrations with which agreement has been reached.
T10.24	The Bureau shall publish in a special section of its weekly circular the information received under T10.23 together with the names of any administrations with which the provisions of this Article have been successfully applied. The Bureau shall then up-date the master copy of the Plan. The new or modified entry in the Plan shall then have the same status as others appearing in the Plan and shall be considered as being in conformity with the Plan.
T10.25	The relevant provisions of the Plan shall be applied when frequency assignments are notified to the Bureau.
T10.26	If no agreement is reached between the administrations concerned the Bureau shall carry out any study that may be requested by those administrations. The Bureau shall inform them of the results and of any recommendations it may be able to offer for a solution of the problem.
T10.27	When a proposed modification to a plan involves developing countries, administrations shall seek all practicable solutions conducive to the economic development of the radiocommunications systems of those countries.

RECOMMENDATION COM5-A

**FREQUENCY SHARING IN THE BANDS 1 610.6 - 1 613.8 MHz AND 1 660 - 1 660.5 MHz
BETWEEN THE MOBILE-SATELLITE SERVICE AND
THE RADIO ASTRONOMY SERVICE**

The World Radiocommunication Conference (Geneva, 1995),

with a view

to facilitating the use of frequency bands allocated to the mobile-satellite service (MSS) and with due regard to existing services to which those bands are also allocated,

considering

- a) that the band 1 610.6 - 1 613.8 MHz is allocated to the radio astronomy service and the mobile-satellite service (Earth-to-space) on a shared, primary basis and the band 1 660 - 1 660.5 MHz is allocated to the radio astronomy service and the land mobile-satellite service (Earth-to-space) on a shared, primary basis;
- b) that No. [733E] S5.372 of the Radio Regulations states that "harmful interference shall not be caused to stations of the radio astronomy service using the band 1 610.6 - 1 613.8 MHz by stations of the radiodetermination-satellite and mobile-satellite services (No. [2904] S29.13 applies)"; and that [No. 736 and] [Article 36] Article S29 also point[s] out that emissions from space or airborne stations can be particularly serious sources of interference to the radio astronomy service;
- c) that the nature of objects studied by the radio astronomy service in the bands 1 610.6 - 1 613.8 MHz and 1 660 - 1 660.5 MHz demands maximum flexibility in the planning of observatory frequency selection;
- d) that in the bands 1 610.6 - 1 613.8 MHz and 1 660 - 1 660.5 MHz, which are shared between the radio astronomy service and the mobile-satellite service, operational constraints are necessary for mobile earth stations of the mobile-satellite service;
- e) that Recommendation ITU-R M.829-1, which relates to sharing between the mobile-satellite service and the radio astronomy service in the band 1 660 - 1 660.5 MHz, notes that further studies are required, particularly in the areas of propagation models and assumptions used for the determination of separation distances;
- f) that other studies are currently being conducted within ITU-R on sharing between mobile earth stations of the mobile-satellite service and the radio astronomy service in the band 1 610.6 - 1 613.8 MHz;
- g) that the threshold levels of interference detrimental to the radio astronomy service are given in Recommendation ITU-R RA.769,

invites ITU-R

- 1 to conclude its studies on propagation mechanisms, including those necessary for maritime and aeronautical environments, in order to establish appropriate separation distances between mobile earth stations of the mobile-satellite service and radio astronomy stations;
- 2 to conclude its studies on technical means to be adopted by stations of the mobile-satellite service, including blockage of emissions and the use of directional antennas where feasible, when mobile earth stations operate within the separation distances referred to in *invites 1* above;
- 3 to report on the outcome of those studies in time for consideration by a competent conference,

urges administrations

to participate actively in those studies.

RECOMMENDATION COM5-B

**DEVELOPMENT OF POWER FLUX-DENSITY AND EQUIVALENT ISOTROPICALLY
RADIATED POWER LIMITS TO BE MET BY FEEDER LINKS OF
NON-GEOSTATIONARY-SATELLITE NETWORKS IN THE
MOBILE-SATELLITE SERVICE FOR THE PROTECTION
OF GEOSTATIONARY-SATELLITE NETWORKS IN
THE FIXED-SATELLITE SERVICE IN BANDS
WHERE No. [2613] S22.2 OF THE
RADIO REGULATIONS APPLIES**

The World Radiocommunication Conference (Geneva, 1995),

considering

- a) that, for operators both of geostationary-satellite networks in the fixed-satellite service (GSO/FSS) and of feeder links of non-geostationary-satellite networks in the mobile-satellite service (non-GSO/MSS), it would be beneficial to have a precise definition of the level of protection implied by No. [2613] S22.2 of the Radio Regulations in order to reduce regulatory uncertainties;
- b) that, in particular, for GSO/FSS operators, knowledge of the level of protection to be expected from existing and future non-GSO/MSS feeder links is essential for the design of future systems and for ensuring the protection of existing GSO/FSS systems;
- c) that, in particular, for non-GSO/MSS feeder link operators, knowledge of the level of protection to be granted to existing and future GSO/FSS networks is essential in order to guarantee that the capability of providing this protection be fully considered during the design of the feeder-link network;
- d) that the benefits of precisely defining the level of protection to be granted, as referred to in *considering* c), would be better achieved by specifying the maximum levels of interfering emissions rather than the maximum levels of their effect;
- e) that the several aspects addressed in *considering* b), c) and d) could be satisfied by limiting the equivalent isotropically radiated power (e.i.r.p.) that a feeder-link station in a non-GSO/MSS system can radiate towards the geostationary-satellite orbit and by limiting the power flux-density that a non-GSO/MSS space station transmitting to any of its feeder-link stations can produce at any given point on the Earth's surface,

recommends that ITU-R

- 1 continue to study, as a matter of urgency, the possibility of developing e.i.r.p. and power flux-density limits to be met by non-GSO/MSS feeder links in order to protect GSO/FSS networks in accordance with No. [2613] S22.2 of the Radio Regulations in bands where Resolution 46 (Rev.WRC-95) does not apply;
- 2 develop an appropriate Recommendation (or Recommendations) reflecting the results of those studies within the next two years.

RECOMMENDATION COM5-C

**FURTHER WORK BY ITU-R ON DETERMINATION OF THE COORDINATION AREA
AROUND EARTH STATIONS OPERATING WITH GEOSTATIONARY-SATELLITE
NETWORKS IN THE FIXED-SATELLITE SERVICE AND EARTH STATIONS
PROVIDING FEEDER LINKS TO NON-GEOSTATIONARY-SATELLITE
NETWORKS IN THE MOBILE-SATELLITE SERVICE OPERATING
IN OPPOSITE DIRECTIONS OF TRANSMISSION**

The World Radiocommunication Conference (Geneva, 1995),

considering

- a) that this Conference has identified certain frequency allocations to the fixed-satellite service (FSS) for use by feeder links of non-geostationary-satellite networks in the mobile-satellite service (non-GSO/MSS);
- b) that these frequency bands are also used by stations in the FSS operating with geostationary (GSO) satellites, in the opposite direction of transmission from non-GSO/MSS feeder links;
- c) that, in order to avoid mutual interference between GSO and non-GSO/MSS feeder-link earth stations operating in opposite directions of transmission, there is a need to determine the coordination area of such earth stations;
- d) that Recommendation ITU-R IS.849, supported by Recommendation ITU-R IS.847, can be used to determine the coordination area of GSO and non-GSO/MSS feeder-link earth stations operating in opposite directions of transmission;
- e) that, in order to utilize these Recommendations, the parameters of typical transmitting and receiving non-GSO/MSS feeder-link earth stations operating in these frequency bands are required;
- f) that the required parameters could not be made available until the frequency allocations to the FSS, for use by non-GSO/MSS feeder links, were known,

noting

that the 1997 World Radiocommunication Conference (WRC-97), under its agenda, will review the procedures set forth in Appendix 28 of the Radio Regulations,

recommends

that ITU-R conduct the necessary studies, as a matter of urgency, in order to develop the appropriate technical coordination parameters and/or Recommendations necessary for the determination of coordination areas around earth stations operating with geostationary-satellite networks in the FSS and earth stations providing feeder links to non-GSO/MSS networks,

invites

administrations to participate in the work of ITU-R on this subject,

invites the Director of the Radiocommunication Bureau

to report on the progress of these studies to WRC-97.